FOR MYSORE STATE

5670. II-37—100,000—21-5-43.

PUBLIC (RESETTLEMENT) (19~~43~~ 46) Department.

Ms. SERIES.

G.O. No ~~735~~ 785

Dated 30th March, 1946.

[Despatch Abstract.]

POST-WAR RECONSTRUCTION - Co-Operative Workshops for ex-service personnel - Establishment of Brick, Tile and Cement Products Factories - General approval - Accorded.

GOVERNMENT OF MADRAS

PUBLIC (RESETTLEMENT) DEPARTMENT.

G.O. No. 785, 30th March 1946.

POST-WAR RECONSTRUCTION - Co-operative Workshops for ex-service personnel - Establishment of Brick, Tile and Cement Products Factories - General approval - Accorded.

ORDER - No. 785, Public (Resettlement), dated 30th March 1946.

His Excellency the Governor of Madras accords general approval to the scheme for the establishment of brick, tile and cement products factories submitted by the Director of Resettlement and Employment, Madras, subject to the following remarks:--

(1) Up to six factories - one in each district to be selected according to recruitment figures and the demand for employment may be started at once.

(2) No housing scheme for the workers to be undertaken for the present.

(3) Guarantee may be given for the repayment of the loans advanced by the Central Banks to the Co-operative Society for its working expenses during the first year in the first instance, subject to a suitable maximum being fixed in consultation with the Government.

(4) It is presumed that the rates of pay proposed for the staff are consolidated rates, that no separate dearness allowance will be paid and that the staff will not be Government servants and will get bonus on the same scale as the members of the society if profits are sufficient. For the Co-operative Sub-Registrar the standard scale of pay may be allowed as he will presumably be a Government servant whose services are lent to the society. Only the cost of the supervisory staff, i.e., in this case the Co-operative Sub-Registrar, clerks and peons, will be met by the Government. The cost of staff for working the concern, namely, workshop superintendent, maistris and dip driver should be met by the society.

2. The Director of Resettlement and Employment, Madras, is requested to submit detailed plans and estimates accordingly for establishing six factories at once. Proposals for each factory should be submitted separately as and when they are ready

3. The suggestion of the Director to address the Government of India for raising their contribution towards housing schemes from 12½ per cent to 25 per cent will be considered separately.

(By Order of His Excellency the Governor)

SP/10.6.

A.H. SOUTHORN,
Deputy Secretary to
Government.

To
The Director of Resettlement and Employment.
The Registrar of Co-operative Societies.
The Accountant-General (through the Finance Department)
The Development Department.
The Finance Department.
Copy to the Services Resettlement Liaison Officer.
The Chief Civil Liaison Officer.

P.T.O.

The Secretary, Madras Provincial Sailors, Soldiers, and Airmen's Board.

ANNEXURE.

SCHEME.

POST-WAR RECONSTRUCTION - Re-employment of ex-servicemen - Co-operative Factories - Establishment of Brick, Tile and Cement Products Factories.

During the war, owing to various controls and difficulties in the procurement of building materials, civilian building construction practically ceased. At the same time, there has been an increase in our population at the rate of 1.1 per cent per annum in geometric progression. Consequently, there is now a large demand for house construction. This demand is in fact likely to increase further on account of the rise in the purchasing power in the hands of the people.

At present houses in our rural areas are badly designed, ill-ventilated and insanitary, the materials and methods adopted in their construction being generally crude and wasteful.

The manufacture of bricks and tiles commonly known as country bricks and tiles is a seasonal industry. They are made in non-rainly months in a crude way and burnt in a wasteful manner - using generally a pound of wood fuel for burning each brick. As they are not burnt in scientifically designed kilns, about a third of the bricks are either unburnt, underburnt or overburnt. Brick manufacture, therefore, lends itself to improvement in two respects - methods of manufacture and processes of burning.

The methods of manufacture can be improved by moulding the bricks on pallets and drying them on a levelled surface under cover. Such bricks are known as table mouhded bricks.

The processes of burning can be improved by loading the bricks in a continuous kiln and using agricultural wastes such as paddy husk and groundnut husk and coal dust or slack coal as fuel. In a continuous kiln the heat generated by the fuel is used to a large extent and the problem of unburnt, underburnt or overburnt bricks is practically eliminated. The Continuous kiln is well insulated and the heat from the waste gases is used both for ~~insulated~~ pre-heating the air used for the combustion of the fuel and for reducing the moisture content of the bricks to be burnt. The calorific or heat value of the fuel required for burning a unit of brick in the continuous kiln is about 40 per cent of that required for burning a unit in the country kiln. The province's fuel bill for brick manufacture can be reduced t to about a fourth of what it is at present if credit is taken for the efficient utilization of cheaper fuels such as paddy husk, groundnut husk and coal dust in the continuous kiln. In other words, with the fuel now burnt our brick production can be increased by about 2½ times at a low cost per unit of manufacture or with the amount now spent on fuel our production can be quadrupied.

The table moulded brick offers three advantages. They are (1) increase in strength and life of masonry, (2) savings in lime and (3) improvement in appearance.

A table moulded brick is about twice as strong as a country brick, but table moulded brick masonary is bout 1½ times as strong as country brick masonary for, the strength of mortar is the same in both cases. Further, table moulded brick masonry has longer life.

A unit of table moulded masonry construction requires about 18 c.ft. of lime mortar as against a minimum of 25 c.ft. required for a unit of country brick masonry. Further, table moulded brick masonry can be left pointed while it is necessary to plaster country moulded masonry. There is also the advantages resulting from the increased load which table moulded brick masonry can carry as compared with country brick masonry The net saving in lime in the case of a 1' 1½'' thick wall can be as much as 8 c.ft. per unit of construction. When it is remembered that the lime supply as well as fuel for calcining ~~lime stone~~ limestone are bottle necks in any large schemes of rural and urban housing, the importance of table moulded bricks will be obvious.

A pointed table moulded brick masonry wall presents an artistic appearance.

In modern building construction, cement products pay a very important part. There are many cement products such as verandah posts, sun-shades, flower-pots, etc., for which a large demand can be created. Cement products like pipes for irrigation purposes, rings for wells, troughs for feeding cattle, etc., can also be popularized. The Department of Industries have development the use of cement concrete pipes for lining bore-wells.

I, therefore, propose to establish twenty-two Co-operative Brick, Tile and Cement Products Factories for ex-servicemen with improved methods of manufacture, at the rate of one in each of the districts except Malabar, South Kanara and the Nilgiris. The demand for brick products in the Nilgiris does not justify the opening of a factory while the industry has already been developed to some extent in Malabar and South Kanara. Apart from acting as demonstration centres for the people enabling them to improve and economise in the manufacture of bricks and titles, the factories will provide employment for about 4,500 ex-servicemen at a wage-rate of Rs. 1-4-0 per head per diem with a bonus equivalent to about two months' wages and a dividend of 5 per cent on the share capital contributed by them. Opportunity will also be taken to popularize cooking ranges made of clay which will reduce fuel consumption by at least 50 per cent. The 'Adayantaya Cooking Range' patented by the Department of Industries could not be popularized owing to the very high cost of its manufacture in case-iron. It has since been built in clay in the ordinary potters kiln with great success. The range will burn, efficiently and economically, waste fuels such as paddy husk, saw dust and dry leaves. Wide distribution of this range will make a material contribution towards the solution of our fuel problem.

The factories will be established at the following Places:--

NAME OF THE TOWN	Population strength.	Name of the district.	Number of factories
Madras	777,739	Madras	
Madura	239,144	Madura	
Trichinopoly	159,566	Trichinopoly	
Coimbatore	130,348	Coimbatore	
Salem	129,702	Salem	
Bezwada	86,184	Kistna	
Guntur	83,599	Guntur	
Conjeevaram	74,635	Chingleput.	
Rajahmundry	74,564	East Godavari	

/True Copy/

SP/10.6.

NAME OF THE TOWN.	Population strength.	Name of the district.	Number of factories
		North Arcot	1
Vellore	71,502	~~East Godavari~~	1
Vizagapatam	70,243	~~North Arcot~~	1
Tanjore	68,702	Vizagapatam	1
Ellore	64,911	Tanjore	1
Tinnevelly	60,676	West Godavar	1
Cuddalore	60,632	Tinnvevelly	1
Nellore	56,315	South Arcot	1
Rajapalayam	46,289	Nellore	1
Cuddapah	28,246	Ramnad	1
Chittoor	27,835	Cuddapah	1
Hospet	26,023	Chittoor	1
Nandyal	25,886	Bellary	1
Anantapur	21,482	Kurnool	1
	---	Anantapur.	1

		Total.	22

In each case the factory will be run by a Co-operative Society the membership of which will be confined to ex-servicemen.

embership and share capital - The Co-operative Society will have a membership of about 200. It will be registered with a share capital of Rs. 2,00,000 divided into 4,000 shares of Rs. 50 each. Each ex-serviceman will be required to subscribe for at least one share subject to a maximum of twenty shares.

Management - The management of the Society will vest in a Board of segen Directors. For the first three years, the entire Board will be nominated by the Government from among officers of Government and the officials. At the end of three years the Board will consist of four persons elected by the members from among themselves and three persons nominated by the Government.

Capital expenditure - It will be necessary to incur the following expenditure:-

~~Land~~.	Rupees.
Land.	10,000
Administrative buildings.	10,000
Kilns and sheds.	
Brick kiln	3,000
shed over kiln	10,000
Two motor and bus sheds for brick and cement product manufacture.	22,000
One motor and bus shed for ~~the~~ tile manufacture	11,000
Drying sheds for bricks - 20,000 sq. ft.	60,000
Two tile kilns.	12,000
Well, drains, pathways, curing tanks, etc.,	5,000
Equipment - (Brick and Cement Section).	
Pug mill with two sets of Rollers and Table	6,000
12 side tipping waggons.	3,000
Light rail track, 1,000 R.ft.	4,000
Wheel Borrows.	500
Brick moulds, pallet boards, spades, cement moulds, rammers, crowbars, posts, etc.,	1,000
Motor 30 horse-power	2,500
Pumping set and piping	2,500
Tile Section.	
Tile press	1,500
Tile Frames.	9,000
Racks.	2,000
Miscellaneous.	5,000

	1,80,000

This will work out at the rate of about Rs 300 per each ex-servicemen employment.

RECURRING EXPENDITURE.

Brick, Tile and Cement Products Factory -

Labour -

	Rs.	
Bricks --	115	Average wages Rs. 1-4-0 per day.
Tiles.	60	
Cement Products.	25	
	200	

	Rs.
200 X 30 X 12 X 1 1/4	90,000

Fuel.--

Slack coal for bricks 80 tons per month slack coal for tiles 20 tons per month 100 X 12 tons at Rs. 20 per cent ton.	24,000
Electric Power.	5,000
Depreciation on kilns, machinery, etc., at 10 per cent on Rs. 57,000	5,700
Depreciation at 5 per cent on capital of Rs. 1,23,000 employed in construction of buildings.	5,650
Royalty on clay.	600
Interest on working capital of Rs. 40,000 equivalent to three months production.	2,000

Eshablishment:-	Rs.			
Co-operative Sub-Registrar	150	660	X 12	7,920
Workshop Superintendent	120			
Three maistris	150			
Head clerk cum accountant	80			
Two clerks	80			
Two peons.	20			
Driver	50			
	660			

Cost of materials for 12,000 cooking ranges at Rs. 2 each.	24,000
Miscellaneous stores, oils, etc.,	1,000
Cement steel rods and wire for cement products	4,000
Maintenance and repairs of kilns, etc.,	2,300
Contingencies.	1,830
Total.	1,74,000

As per G.O. Ms. No. 452, Public (Civil Defence-B) dated 14th February 1945 Government may meet the cost of the establishment for the first year and, if necessary, for the second and third years.

Working capital - The total amount required for working capital is estimated at Rs. 40,000 being equivalent to three months' working expenses. The amount will be met partly from the share capital of the Society, but chiefly by borrowing from Co-operative Central Banks. As per G.O.Ms.No. 452, Public (Civil) Defence-B), dated 14th Febraary 1945, Government may guarantee, if necessaey, the sums lent by the Co-operative Central Banks.

/True Copy/

Profits - The total outturn of the factory is expected to be about Rs. 2,04,000 made up of 48 laks of bricks at Rs. 20 per 1,000 i.e. Rs. 96,000 six lakhs of tiles at Rs. 80 per 1,000 i.e. Rs. 48,000. Cement products Rs. 12,000 and 12,000 cooking ranges at Rs. 4 each, i.e., Rs. 48,000. It is estimated that the total expenditure will amount to Rs. 1,74,000. This will leave a profit of Rs. 30,000. Out of this profit Rs. 7,500 towards a Dividend and Bonus Equalization Reserve Fund and the balance will be distributed among the members by way of bonus which will amount to about two months' wages of each member

Finance - The capital expenditure of Rs. 1,80,000 will be financed from the following sources:-

1. Share capital.
2. Government grants.

The share capital of the Society will be, as already mentioned above, Rs. 2,00,000. But the amount expected to be collected immediately after the formation of the Society is only about Rs. 10,000.

So far as Government grants are concerned I recommend that the total capital expenditure of the twenty-two factories, namely Rs. 39,60,000 may be shared equally between the Central and the Provincial Governments and the Post-War Services Reconsturction Fund.

Housing - It will be possible to provide permanent quarters for workers at a cost of Rs. 750 per head. The total cost of housing in the case of each of the factories will, therefore, come to Rs. 1,50,000. In his budget speech, the Hon'ble Finance Member, Government of India indicated that the Central Government are prepared to give a subsidy up to 12½ per cent of the cost of Providing housing for industrial workers if the Progincial Government concerned are also prepared to make he equivalent grant. If the Provincial Government accept this proposal, 25 per cent of the cost of housing, viz., Rs. 37,500 in the case of each of the factories will be met from Public Funds. I recommend that the balance of Rs. 1,12,500 may be lent to the Society at 4 per cent interest the loan being made repayable in twenty equal annual instalments. Provision will be made for payment of the instalment amounts from out of the rents collected from the members in the first instance and the balance, if any, from out of the profits of the Society. I would also like to suggest that in the case of Industrial Co-operative Societies like these membership of which is confined to ex-servicemen, Government of India may be requested to raise their contribution from 12½ per cent to 25 per cent. If the Government of India accept this proposal, the amount of loan which the Provincial Government will have to advance will be reduced to that extent.

As already mentioned, the total outturn of each of the factories is expected to be Rs. 2,04,000. The total outturn of the twentytwo factories, therefore comes to Rs. 44,88,000. On this, Government will get an annual income of Rs. 44,88,000 44,880 by way of sales-tax,. Apart from the indirect benefit which the Government will get in the shape of reduction in the cost of construction of public buildings, even from the standpoint of public finance, the Provincial Government will thus get a return of about 2.6. per cent on their contribution of Rs. 17,32,500, that is, Rs. 13,20,000 towards block expenditure and Rs. 4,12,500 towards housing.

I have asked the Board of Revenue for 14.46 acres of alda land at the disposal of Government in Amankikarai village of Chile Chingleput district for the proposed Madras Co-operative Brick, Tile and Cement Products Manufacturing Society, Limited. The Board recommended the grant in its Ref. No. B-718/46-1, dated 23rd February 1946. The clay deposit in that land is considered suitable for brick and tile manufacture by the Cermic Expert of the Department of Industries and Commerce after personal inspection. SP/11.6.